

**Abstract of the Disclosure**

5 A portable journal turning lathe for machining a shaft at a job site, including a  
pair of clamping rings that are adapted to be centered at spaced apart locations along  
the length of the shaft to be machined. Extending between the clamping rings is a  
plurality of guide shafts which slidably support a split ring clamshell assembly. A  
cutting tool carrier is affixed to the rotatable ring portion of the clamshell assembly so  
that when the movable ring is driven the tool carrier orbits the shaft being machined.  
A plurality of feed screws driven by a servomotor translates the clamshell assembly  
10 along the guide shafts.